

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 21806-00158-US	
		Application Number 10/709,041-Conf. #3040	Filed April 8, 2004
		First Named Inventor Kiran V. Chatty et al.	
		Art Unit 2815	Examiner M. E. Warren
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant /inventor. _____ /Arlene P. Neal/ Signature</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) _____ Arlene P. Neal Typed or printed name</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number _____ 43,828 _____ (202) 331-7111</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____ August 28, 2009 Telephone number _____ Date</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input type="checkbox"/> *Total of _____ 1 _____ forms are submitted.</p>			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kiran V. Chatty et al.

Application No.: 10/709,041

Confirmation No.: 3040

Filed: April 8, 2004

Art Unit: 2815

For: **LOW TRIGGER VOLTAGE ESD NMOSFET
TRIPLE-WELL CMOS DEVICES**

Examiner: M. E. Warren

REMARKS ACCOMPANYING REQUEST FOR PRE-APPEAL BRIEF REVIEW

In accordance with the Pre-Appeal Brief Conference Pilot Program guidelines set forth in the July 12, 2005 Official Gazette Notice, Applicants hereby submit this Pre-Appeal Brief Request for Review of the final rejections of claims 1 and 3-18 in the above identified application. Claims 1 and 3-18 were finally rejected in the Office Action dated May 28, 2009. Applicants hereby appeal these rejections and submit this Pre-Appeal Brief Request for Review. A Notice of Appeal is filed timely concurrently herewith. This Pre-Appeal Brief Request for Review is being timely filed. As will be discussed below, numerous clear errors exist in the final rejections that require withdrawal thereof.

Claims 1 and 3-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Applicant's Prior Art Figure 2B (APAF) in view of U.S. Patent Publication No. 2002/0122280 to Ker et al. (hereinafter "Ker") and U.S. Patent No. 6,194,776 to Amano et al. (hereinafter "Amano"). As outlined below, the APAF, Ker and Amano fail to disclose or suggest the combination of elements of claims 1 and 3-18. The failure of the APAF, Ker and Amano to disclose each and every element of the present claims constitutes clear error.

Independent claim 1, in part, recites "a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well

to the substrate.” Claims 7 and 13 recite similar features. The Office Action acknowledged that APAF does not teach or suggest these features but cited Ker to cure the deficiencies of APAF.

Ker does not cure the deficiencies of APAF, as outlined above. Paragraph 0047 of Ker, which is cited in the Office Action, discloses that the two deep N-well regions are placed closer to limit the connection region of the P-well and the P-substrate, thereby increasing the equivalent resistance between them. There is no teaching or suggestion in Ker, however, of “a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate.” (underlining added).

In the “Response to Arguments” section, the Office Action alleged that because paragraph 0047 of Ker discloses that the equivalent resistance is increased between the substrate and well region, Ker has configured the device to have the proper distance and doping level necessary for increasing the substrate resistance. As noted above, paragraph 0047 Ker merely discloses that to increase the equivalent resistance between the P-well and the P-substrate, the two deep N-well regions are placed closer to limit the connection region of the P-well and the P-substrate. There is no teaching or suggestion in Ker of a path “having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate.” (underlining added)

Even if as the Office Action alleged, Ker discloses that resistance is increased between the substrate and well region, there is no disclosure that the device in Ker is configured to have the proper distance and doping level necessary for increasing the substrate resistance “by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate.” (underlining added) Applicants submit that the pending claims do not simply recite that resistance is increased between the substrate and well region in a device configured to have the

proper distance and doping level necessary for increasing the substrate resistance, as alleged in the Office Action. Instead, the pending claims recite “a path of said substrate … having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate.” (underlining added) There is no teaching or suggestion in Ker of such a path. In particular, there is no teaching or suggestion in Ker of “a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate,” as recited in claim 1.

Amano does not cure the deficiencies of APAF and Ker.

Therefore, Applicants submit that the combination of APAF, Ker and Amano does not teach or suggest the combination of elements recited in claims 1, 7 and 13. Each of claims 3-6, 8-12 and 14-18 depends on claims 1, 7 and 13 and incorporates all of the features of claims 1, 7 and 13, in addition to the further features recited in claims 3-6, 8-12 and 14-18. Hence, claims 3-6, 8-12 and 14-18 are also allowable at least due to the dependence on claims 1, 7 and 13. Therefore, Applicants respectfully request that this rejection of claims 1 and 3-18 under 35 U.S.C. §103 is in clear error and should be withdrawn.

For all of the above noted reasons, it is strongly submitted that certain clear differences exist between the present invention as claimed in claims 1 and 3-18 and the prior art relied upon by the Examiner. It is further submitted that these differences are more than sufficient that the present invention would not have been anticipated or obvious to a person having ordinary skill in the art at the time the invention was made. This final rejection being in clear error, therefore, it is respectfully requested that the Examiner's decision be reversed in this case regarding the rejections of claims 1 and 3-18. Reconsideration and withdrawal of all prior rejections and a Notice of Allowance are respectfully requested.

Applicants believe no fee is due with this response other than any fee that may be indicated on an accompanying paper. However, if a fee is due, please charge our Deposit Account No. 09-0456, under Order No. 21806-00158-US from which the undersigned is authorized to draw.

Dated: August 28, 2009

Respectfully submitted,

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